

[*IMPEDANCE MATCHING CIRCUIT FOR REJECTING AN IMAGE SIGNAL VIA A MICROSTRIP STRUCTURE*]

Abstract of Disclosure

An impedance matching circuit for providing a lossless target signal transmission and rejecting image signals of heterodyne and super-heterodyne transceiver. The impedance matching circuit includes a grounded metal membrane, a first microstrip line connected with an input circuit, a second microstrip line connected with an output circuit, and a third microstrip line connected with either the first microstrip line or the second microstrip line. The first microstrip line is not connected with the second microstrip line, and the length of the third microstrip line is equal to a quarter wavelength of an image signal. When the target signal and the image signal transmit to the impedance matching circuit, the image signal will bypass to a grounded metal membrane, and the target signal will transmit to the output circuit without signal decay through electromagnetic coupling of the first microstrip line and the second microstrip line.

Figures